UWIN (Utah Wireless Integrated Network)
Minutes
Governing Board
April 2, 2004
10am-11: 30
SOB Room 4112

Welcome: Dave Fletcher

- Move for approval of Minutes 3/12/2004 by Carlos Braceras and seconded by Ed McConkie

- **Progress Reports**:
  OmniLink and Connectivity report by Phil Bates
  - Technical people met to discuss options.
  - Clarification of several items with Motorola.
  - Next Monday finalize.

- **Technical Steering Committee report by Floyd Ritter**:
  - Project that installs consoles in dispatch centers and the five selected for phase one are 1) Eter 2) Richfield, 3) EOC in Health 4) Millard County 5) Utah National Guard.
  - 800 expansion four sites to enhance availability to travelers 1) Lan Peak, 2)Monroe Peak, Frisco Peak, and Utah Hills in St. George. Utah National Guard part of first phase. Console being installed and radio systems installed as part of this: Francis Peak (three radio systems: NG, military and MARS systems) DELL (3), Lake Mountain (3), and Ford Ridge (3), Connected to the CSEP which is the burn area – a tri-county system and Nelson Peak Civil Defense Repeater.
  - The OMNILINK timeline is May; system test is June, and operational July. Connecting dispatcher systems by October 2004, and completion of project March 2005.
  - Mobile data: Narrow banding migration project; Boyd Webb was present at those presentations. Floyd gave a brief presentation of his trip to the Washington DC National Public Safety Telecommunications Council. They are going to assume the project of trying to plan a coordinated VHS spectrum frequency plan. No guidelines today; establishing a national standard.
  - Agencies migrating to 800; yes and no – voluntary participation. Whatever we do in Utah may not necessarily be the rule.
  - Mutual Aid allows you the ability to talk to the dispatcher to communicate on a patch through 800.

- **700 MHz Mobile Data Proposal**
  - Met in Logan on March 5. Randy Almond, Vice chair for Region 41 gave an update:
    - Participation fewer than expected and looking for more support.
    - Yahoo group set up for the subcommittee
    - Boyd Webb of ITS gave presentation on 4.9, and 4.9 subcommitte was created chaired by Tim Cornia, DPS, who also chairs the 802.11 committee.
    - OmniLink interoperability timeline test and operation critical. Weekly meeting with all participants
  - Review financial cost of rollout statewide. Spreadsheet of costs presented and handed out by Dave Fletcher
    - Overall cost covering the majority of State would cost $1,500,000 in infrastructure.
    - In addition there would be ongoing monthly costs associated with maintaining the equipment and connectivity associated with tying it into the wide area network. Breakout would be, for example, 2500 units of State and local government using the system. Estimated monthly rate $15.00. 500 units would be approximately $72. Fund through Homeland Security or another venue, the $1,500,000 infrastructure build out, the rate for 2500 users would go below $10

per user. Cost depends on how many users on the system. Monthly charge $25,000 after first two years under warranty.

- By fall speed would go to 100 kilobits. Next year would be moved to wide band channels. Deploy with 25 case channels first
- Customer base for cost recovery.
- Today we don't have applications for this, but any government entity could tie into this.
- Finance committee look at options of funding: Federal grants or Legislative appropriations. Rate would become very reasonable with help in funding. Recommendation next month for consideration of options for funding alternatives.
- Can it be paid for over time? Cost up front heavy? Cost could either be borne as a rate or look at other funding secured. Could be phased in; ITS has capital authority in budget that they could start rolling it out based on UWIN committee's approval.
    - Time frame implementation.
    - ITS would want to look at where the needs are, whose is going to be using it, etc, focusing on areas where customer base that came on first.
    - Survey of all potential 700 MHz users to determine where the needs are, who would be using, etc. Uintah, Duchene, St George, etc. 2500 units statewide is certainly possible.
    - Upgrades per unit cost for upgrades: 33 to 100 is no charge – changing the modulation. There is a $300-$500 cost to jump from 100 to wide band channel. Speeds not tested yet in our environment.
    - Modems $2,000 with the antennas, plus the computer and the software. IT Mobile is the vendor selected through the bid process.
- Computer Training: Application specific (GPS is included)
    - Cost separate from ongoing maintenance on OmniLink. Estimated $500,000.
    - Most agencies have laptops; most of them looking at using Federal grants to put in the infrastructures in the mobiles. Some still need laptops. Total solution cost for each mobile unit would be must more acceptable and desirable; make it part of the survey.

- **National Incident Management System (NIMS)**
    - Approved in March; significant component for communication. Guidelines and standard of multi-agency nationally. In order to receive Federal funds, must comply with NIMS. Consistent nationwide approach for Federal, State and local to work affectively. We would be dealing with only the communication part. Communications component is one of the five key areas of communication for incident and information management.
    - Full final document presentation available on Department of Homeland Security website (150 pages)
    - We don't have all of those standards – coming out over the next year – communication and information management along with supporting technologies.
    - Preparedness standards.
    - Dave will send out the slide presentation of NIMS
    - Utah, Cap Win, and a few others viewed as leaders in interoperability. Colorado the State we are doing the most with right now. Agencies that are crossing State boundaries are making it necessary to be working on same standard communication. Olympics helped offer much of the groundwork for standard communication.
    - DES staying on top of this information; multi-jurisdictional approach. Coordinate communications component through UWIN group.
    - Issues with infrastructure protection, including utilities.
    - Network in terms of unit systems developed on statewide basis and making sure they are suitable for private sector and nongovernmental organizations that are part of an emergency response management system.

- **Report from NPSTC**
  - National Public Safety Telecommunications Council is a federation of associations representing public safety telecommunications. The associations they represent are vast.
    - Develop and make recommendations to appropriate governmental bodies regarding public safety telecommunications issues and policies that promote greater interoperability and cooperation among Federal, State, and local public safety agencies.
    - Any items passed must be passed unanimously, which may be a fault.
    - Very technically oriented
    - Writing group
    - Software defined radio
    - Looking 138-144 MHz frequency spectrum used by the military
    - Regional planning support
    - Narrow banding of VHF

- Phase II Action Items
  - Develop plan for use of 4.9 GHz license spectrum
  - Develop and implement a plan for mesh a network pilot on 4.9 GHz
    - FCC would like to see plan by July 2004.
    - Boyd Webb report:
      - Relatively new spectrum the FCC reallocated and assigned to public safety, issuing rules and regulations last year under WTDOCKET 00-32.
      - 700 MHz regional planning committees asked to submit a plan for how the region intends to utilize this spectrum.
      - Currently issuing licenses before plan is in place. As that plan matures there will be some requirements to licensees so as to work together.
      - No vendors in the US actually manufacturing equipment on 4.9 GHz; however, two vendors that anticipating having type acceptance by the end of April. Limited equipment option.
      - The 802.11J standard, essentially 802.11A which includes the 4.9 GHz spectrum in Japan. With a little modification could be used in ours. FCC fine-tuning some of their rulings. Final ruling sometime this year on several issues. Convergence of equipment, regulation, and software that will make 4.9 implemental early next year.
      - 4.9 GHz plan has been assigned by FCC to the 700 MHz regional planning committee which has a subcommittee chaired by Tim Cornia of Public Safety. This group will be interested in that plan. 802.11J standard incorporates the 802.11 A standard making it possible to buy a single device that slips in your laptop which includes both standards. Capable of much more flexibility.
      - Difference between this and 700 MHz is much more speed and a more robust local network. The 802.11 J Card is $29-50, 700 MHz is $2,000. Comparing apples to oranges
    - Prioritize and implement the next phase of PSAP connectivity to OmniLink
      - Rural Utah regional centers have been connected into the big system. Suggest having technical committee try to get as many as can this next year.
      - RFID (Radio Frequency IDs) Run by batteries or scanner.
        - Micro devices that output a radio frequency. Application, for example, would be Wal-Mart's use. Putting RFID on all merchandise; instead of having a bar code, it will have a RFID; when it goes through a checkout, a radio scanner can read all the IDs in the cart all at once.
        - Bills in the Legislature policy because of the privacy issue. Credit card could be read from your wallet.

- Homeland Security views it as becoming ubiquitous – offices, crime lab, manufacturing plants, etc. One of the uses for government would be agriculturally for cattle, for instance, to track them at any given time. Used for pets currently.

- Outline the next couple of months to determine if we want to pilot use in Phase Two.
  - In a major crisis we could make use of it with three antennas and handing cards to everyone who went into the area ($3 a card). Cheap technology.
  - Using in some of the trade show events so vendors can recognize you when you walk up to their trade booth
- Security application
  - Using in Customs to identify freight trucks as they cross the border
  - US visits as secondary identification
  - Apply to passports to identify individuals
  - Homeland Security pushing for adoption for cargo containers to determine tampering.
    - Carbon dioxide sensor; tie to RFID they could determine if individual hidden in container.
  - Correction needs are met if they have a radio system across the State. The RFID is interesting as to how you could apply it to prisons.
    - Agreement that was signed yesterday between a couple of companies that have contracts with Federal government to speed widespread adoption of RFID tracking technology in the nation's prison systems.

- Narrow band migration
  - Technical Steering Committee is working on a plan for recommendation. Three dates working with: July meeting for TSC to present draft of the technology issues for a preliminary plan. More finalized draft to TSC in September. UWIN meeting in September this will be presented. Post to all agencies in January 2005.
- Training critical
  - Develop a training course so options will be usable. Steve Proctor has ideas to bring to next meeting.
  - The person on the street is not aware of the options.
  - Train the trainer type sessions
  - Technical subcommittee reporting to the Governor to outline training needs and requirements.
    - Volunteer for that? Susi K?
  - Homeland Security good avenue to make it another component of their training.
- Drill-Down Interactive Coverage Map of All Wireless Coverages (CDPD/700/800/VHF, etc.) Mapping capabilities and information available
- Deadline for Phase Two to go through the end of the current Governor's term. Could be accomplished by January 2005.

- Definite and expanding disconnect between Capitol Hill and the end of the row that needs to be addressed.
  - Training needs to be emphasized.
  - Have couple of sessions that these sessions could be discussed.
  - Various representatives to speak on these topic to Administrative-level people. Awareness is not great out of our agencies.
  - Dave F doing a presentation the end of this month at Rhodes school - public works entities, local government.

- Array of things to be done in this area.

- IP-Based Authentication Study
  - Executive summary of National Law Enforcement and Corrections Technology Center to determine the need for feasibility of implementing a national IP-based public safety interconnectivity and authentication process. If interested in recommendations, Dave Fletcher will email the full document to you.

- Motion to table Phase Two until next meeting for further discussion and determinations by Steve Foote, and seconded by Steve Proctor. Motion carried.

- Outreach and Education
  - Environment of suspicion and scrutiny and an appetite for reports on information sharing.
  - Regular progress report from UWIN to the Legislature and local legislative bodies. Because of our assumption that individuals around the State are informed or not could slow or divert project politically
  - Report to the Interim Utah Technology to formally report.
    - Key to seeking Legislature appropriation.
  - Agenda end of April or May. Letter from Camille or Dave Fletcher to leadership to give them a quick update and some of the proposals in Phase Two so they feel informed.
  - No documentation FYI on items UWIN board reviewed on shared costs, outlining a progressive path for the future, upgrading systems. Who has put what into the process and who is going to pay for the cost and support of it? This is critical.

Adjournment at 11:30 a.m. until next month at the meeting on Friday, May 7 – 10:00 a.m. – 11:30 a.m. Location to be announced.